I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. (Currently Amended) A compound of Formula I, or a salt, solvate, or hydrate thereof

$$R^1$$
 CN
 CN
 R^4

wherein

- R¹, R² and R³ are each independently selected from H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₆alkylCO₂, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), C₁₋₆alkyl(C=O)NH, C₁₋₆alkyl(C=O)N(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;
- R⁴ is unsubstituted Ar <u>aryl</u>, or Ar <u>aryl</u> substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy, and halo;

X is selected from $(CH_2CH_2O)_n$ and $(CH_2)_n$, and n = 1-4.

- 2. (Currently Amended) The compound according to claim 1, wherein
- R¹, R² and R³ are each independently selected from H, OH, C_{1.4}alkyl, C_{1.4}alkoxy, C_{1.4}alkylCO₂, NH₂, NH-C_{1.4}alkyl, N(C_{1.4}alkyl)(C_{1.4}alkyl), C_{1.4}alkyl(C=O)NH, C_{1.4}alkyl(C=O)N(C_{1.4}alkyl), NO₂, CF₃, OCF₃, and halo;
- R⁴ is unsubstituted aryl, or aryl substituted with 1-4 substituents of C₁₋₆alkyl,

X is (CH₂CH₂O)_n, and

n = 1-4.

- 3. (Original) The compound according to claim 1 or 2, wherein R^1 , R^2 , and R^3 are each independently selected from H, OH, $C_{1.4}$ alkyl, $C_{1.4}$ alkoxy, $C_{1.4}$ alkyl(CO)O, NH₂, NH- $C_{1.4}$ alkyl, N($C_{1.4}$ alkyl)($C_{1.4}$ alkyl), $C_{1.4}$ alkyl(C=O)NH, $C_{1.4}$ alkyl(C=O)N($C_{1.4}$ alkyl), NO₂, CF₃, OCF₃, and halo.
- 4. (Original) The compound according to claim 3, wherein R¹, R² and R³ are each independently selected from H, OH, OCH₃, CH₃CO₂, NH₂, N(CH₃)₂, CH₃CONH, and NO₂.
- 5. (Original) The compound according to claim 4, wherein R¹, R², and R³ are each independently selected from H, OH, and OCH₃.
- 6. (Currently Amended) The compound according to claim 1, wherein R⁴ is unsubstituted Ar aryl.
- 7. (Original) The compound according to claim 6, wherein R⁴ is phenyl.
- 8. (Currently Amended) The compound according to claim 2, wherein R⁴ is <u>unsubstituted</u> aryl, or aryl substituted with 1-4 substituents of methyl or ethyl.
- 9. (Currently Amended) The compound according to claim 8, wherein R⁴ is <u>unsubstituted</u> aryl, or aryl substituted with 1-4 substituents of methyl.
- 10. (Original) The compound according to claim 9, wherein n is 2-3.
- 11. (Original) The compound according to claim 10, wherein n is 3.
- 12-16. (Cancelled).

- 17. (Currently Amended) A method of modulating cell proliferation comprising administering an effective amount of a compound according to claim 1 or a composition according to claim 13, to a cell or animal in need thereof.
- 18. (Original) The method according to claim 17, for inhibiting cell proliferation.
- 19. (Original) The method according to claim 18 wherein the cell is a malignant hematopoietic cell.
- 20. (Currently Amended) A compound of Formula III, or a salt, solvate, or hydrate thereof:

$$R^1$$
 SO_2R^4 CN III

wherein

- R¹, R² and R³ are each independently selected from H, OH, C₁₋₆alkyl, C₁₋₆alkyl, C₁₋₆alkylCO₂, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), C₁₋₆alkyl(C=O)NH, C₁₋₆alkyl(C=O)N(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃, and halo; and
- R⁴ is selected from C₁₋₆alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy and halo, with the provisos that when R¹ and R³ are both H and R⁴ is unsubstituted phenyl, R² is not H, Cl, or OCH₃; when R¹ and R² are both H and R⁴ is unsubstituted phenyl, R³ is not NO₂; and when R¹ and R³ are both H and R⁴ is CH₃, R² is not N(CH₃)₂ and when R⁴ is C₁₋₆alkyl or phenyl, R² is not N(C₁₋₆alkyl).
- 21. (Original) The compound according to claim 1, wherein R¹, R² and R³ are each independently selected from H, OH, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylCO₂, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), C₁₋₄alkyl(C=O)NH, C₁₋₄alkyl(C=O)N(C₁₋₄alkyl), NO₂, CF₃, OCF₃, and halo.

- 22. (Currently Amended) The compound according to claim 21, wherein R¹, R² and R³ are each independently selected from H, OH, OCH₃, CH₃CO₂, NH₂, N(CH₃)₂, CH₃CONH, and NO₂.
- 23. (Original) The compound according to claim 20, wherein R⁴ is selected from C₁₋₄alkyl, phenyl, and pyridyl.
- 24. (Original) The compound according to claim 23, wherein R⁴ is selected from CH₃ and phenyl.
- 25. (Original) The compound according to claim 24, wherein R⁴ is unsubstituted phenyl.
- 26. (Original) The compound according to claim 20, wherein phenyl and pyridyl are unsubstituted or substituted with 1-3 substituents, independently selected from C₁₋₄alkyl, C₁₋₄alkoxy, and halo.
- 27. (Original) The compound according to claim 24, wherein phenyl is unsubstituted or substituted with 1-2 substituents, independently selected from C₁₋₄alkyl, C₁₋₄alkoxy, and halo.
- 28. (Original) The compound according to claim 20, wherein at least one of R^1 , R^2 and R^3 is OH while R^4 is selected from unsubstituted phenyl and phenyl substituted with 1-4 substituents, independently selected from $C_{1.6}$ alkyl, $C_{1.6}$ alkoxy, and halo.
- 29. (Original) A compound selected from:
- 2-Benzenesulfonyl-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienenitrile (CRVIII-33),
- 2-Benzenesulfonyl-5-(4-hydroxy-3,5-dimethoxyphenyl)-penta-2E,4E-dienenitrile (CRVIII-34),
- 2-Benzenesulfonyl-5-(4-nitrophenyl)-penta-2E,4E-dienenitrile (CRVIII-35),
- 5-(4-Acetoxy-3-methoxyphenyl)-2-benzenesulfonyl-penta-2E,4E-dienenitrile (CRVIII-49)
- 5-(3,4-Dihydroxyphenyl)-2-(pyridine-2-sulfonyl)-penta-2E,4E-dienenitrile (CRVIII-50),
- 2-(4-Chlorobenzenesulfonyl)-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienenitrile (CRVIII-51),
- 5-(3,4-Dihydroxyphenyl)-2-(toluene-4-sulfonyl)-penta-2E,4E-dienenitrile (CRVIII-52), and

5-(3,4-Dihydroxyphenyl)-2-methanesulfonyl-penta-2E,4E-dienenitrile (CRVIII-53).

- 30. (Previously Amended) A composition comprising a compound according to claim 20 in admixture with a pharmaceutically acceptable diluent or carrier.
- 31. (Original) A composition comprising, in admixture with a pharmaceutically acceptable diluent or carrier, a compound of Formula IV, or a salt, solvate, or hydrate thereof

$$R^1$$
 SO_2R^4
 R^2
 CN
 IV

wherein

- R¹, R² and R³ are each independently selected from H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₆alkylCO₂, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), C₁₋₆alkyl(C=O)NH, C₁₋₆alkyl(C=O)N(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃, and halo; and
- R⁴ is selected from C₁₋₆alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy, and halo.
- 32-34. (Cancelled).
- 35. (Previously Amended) A method of modulating cell proliferation comprising administering to a cell or animal in need thereof an effective amount of a composition according to claim 30 or 31, or a compound capable of modulating cell proliferation of Formula IV, or a salt, solvate or hydrate thereof:

$$R^1$$
 SO_2R^4
 R^2
 R^3
 IV

wherein

- R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkyl, C_{1-6} alkyl, C_{1-6} alkyl, C_{1-6} alkyl), C_{1-6} alkyl), C_{1-6} alkyl), C_{1-6} alkyl), C_{1-6} alkyl), C_{1-6} alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃, and halo; and
- R^4 is selected from $C_{1\text{-6}}$ alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from $C_{1\text{-6}}$ alkyl, $C_{1\text{-6}}$ alkoxy, and halo.
- 36. (Original) The method according to claim 35, for inhibiting cell proliferation.
- 37. (Original) The method according to claim 36, wherein the cell is a malignant hematopoietic cell.